

# Better Decisions...Better Future The Futron Promise



Business and Market Management • Safety and Risk Management • Program and Technology Management



**Futron Corporation**

www.futron.com • 1.800.807.4927 • ISO 9001 Registered

Copyright © 2012 by Futron Corporation, All Rights Reserved.



ISO 9001  
QMI-SAI Global

**Futron Corporation** is a leading provider of decision management solutions for aerospace, telecommunications, and other technology enterprises. Recognized and accepted as industry standards, Futron's innovative Business & Market Management, Safety & Risk Management, and Program & Technology Management products and services create better decisions and better futures for government, commercial, and international clients. Explore what Futron can do for you at [www.futron.com](http://www.futron.com).

## The CEO's Perspective



Space travel and the space environment are challenging and inherently dangerous and risky. It is hard. It

is also unforgiving—mistakes or errors in process or calculation can result in degradation or loss of the mission, or even loss of life. Success in this environment demands the constant balancing of risks and rewards—in planning, design, and development, and in operations. It takes discipline to manage these costs, risks, and rewards, and to make the right decisions.

Futron Corporation has enjoyed a long and successful track record helping both government and private companies navigate these decisions on the frontiers of space. Through a 25-year partnership with NASA, Futron has supported the Space Shuttle and the International Space Station Programs, among others, bringing programs from initial phases and seeing them through to retirement. We have helped commercial satellite companies make sound decisions that strengthened and sustained their missions. While we will always remain involved in and committed to the aerospace industries, the time is right for Futron to extend our expertise to technology organizations here on Earth.

Why now? Because today, more than ever, businesses consistently need to make sure the decisions they make result in higher performance and better outcomes. Globalization has brought unprecedented opportunities for collaboration. At the same time, it has created much more

interdependence—and volatility. With fewer protective boundaries to dampen them, political, technological, and economic upheavals reverberate like shock waves, affecting businesses and governments around the world.

Many of the challenges and problems that result require organizations to undertake substantial change or transformation—or both. Without a well thought out strategy informed by intelligence—not merely information—and supported by a capability to manage risk and uncertainty, companies may find themselves at a competitive disadvantage in this new global marketplace.

At Futron, we are helping industry and government architect Decision Management Solutions (DMS) especially suited to their specific challenges, issues, and opportunities. A collaboration with Futron represents an investment in an organization's future. Whatever the initiative, program, or project—whether on Earth or in space—between where a company is and its final destination, lie many critical decisions. An investment in DMS not only will immediately affect an organization's performance and results, but also will change and transform its ability to make high-quality decisions indefinitely into the future. Rely on Futron to make hard decisions easier.



Joseph Fuller, Jr.  
Founder & CEO



## Better Decisions Can Transform Your Organization

A Decision Management Solution is a situation-unique instance of processes, tools, information, analysis, and services applied in an integrated fashion so as to enable effective, results-producing decisions.

Making decisions and managing results are what executives, managers, and staffs do every day. But are the decisions resulting in consistently high performance and better outcomes? Are they planned—anticipating change and positioning your business for growth—or reactive and leaving it exposed? When the bottom line matters, when cost containment is essential: a planned response aligned with your organization’s strategic roadmap will ensure high-quality performance and—ultimately—results.

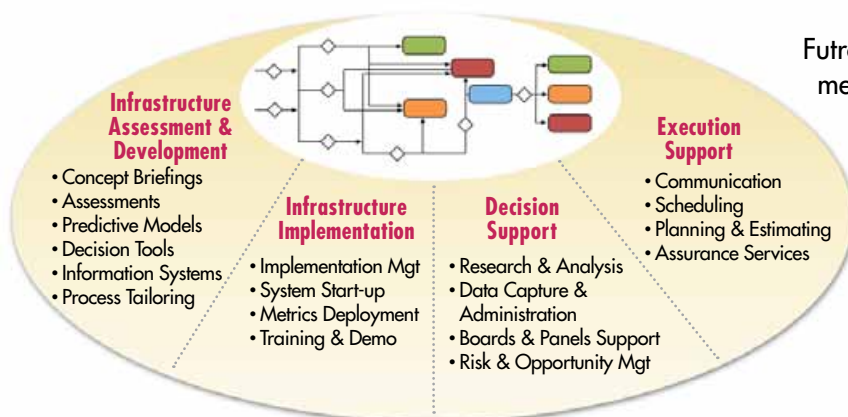
Through our proprietary DMS methodology, Futron helps businesses and government agencies develop the needed infrastructure to make better decisions that transform their organizations. Futron’s DMS is a systematic approach to evaluating and improving your organization’s ability to get the results you want.

### Your Partner in Finding Solutions and Managing Risk

With Futron as your strategic decision management partner, your organization will be well-positioned to refresh your strategy and undertake large-scale initiatives. Your Futron team is particularly skilled at organizational evaluation—developing metrics and measurable targets and assessing outcomes. We excel at working with mission-driven organizations to help solve complex business problems and mitigate risk. As we build your decision-making infrastructure, we rely on your expertise to inform the models we will create, working together to ensure a better future awaits.

Better decisions define Futron’s primary value proposition for clients. A DMS can simplify, refine, and enhance the decision-making process and lead to improved performance and results.

DMS Products and Services Map



Futron’s systematic approach uses coordinated methods and tools to help our clients at all levels. From the enterprise to the discrete program level and at all points in between, we can help you determine:


- the strategic path of your organization
- what markets to pursue
- what products to develop and in what quantity
- where to dedicate resources
- when to change course

## DMS at Work: Futron Designs a Custom DMS FOR NASA

Futron developed and honed its expertise in decision management solutions on the frontiers of space. This case study discusses how Futron used its DMS methodology to build a custom Decision Engine solution to help NASA decommission the Space Shuttle fleet and reallocate its assets to new mission-critical initiatives.

### CASE STUDY

With A Custom Decision Engine DMS From Futron, NASA Successfully Decommissions The Space Shuttle Fleet

<p><b>THE CHALLENGE</b></p>	<p><b>Help NASA retire the Space Shuttle Program while keeping the remaining Shuttle flights on schedule</b></p>  <p>After more than four decades in space exploration with the Space Shuttle Program (SSP), the time had come to retire the fleet in preparation for Shuttle replacement. The agency came to Futron for a DMS to help it make the thousands of important, complex decisions needed to complete the transition and retirement (T&amp;R) phase of the SSP most efficiently and safely.</p>
<p><b>THE SOLUTION</b></p>	<p><b>Futron creates a Decision Engine DMS</b></p> <p>In collaboration with NASA, Futron developed and implemented a Decision Engine DMS to enable NASA to perform the high-volume and -quality decisions required for a successful T&amp;R. Steps included:</p> <ul style="list-style-type: none"> <li>• Benchmarking data from past retirements, documenting lessons learned, and filtering the results into an SSP Transition Plan.</li> <li>• Developing a custom web-based database application to house every Shuttle capability and its complementary data. This Strategic Capabilities Assessment (SCA) was one of the plan's cornerstones.</li> <li>• Designing and building multiple metrics-tracking applications, pulling from the SCA database and the ongoing SSP across all program functions.</li> <li>• Developing a database application to import cost data to measure cost risks to the SSP budget. In creating this application, Futron automated manual processes.</li> <li>• Developing a Monte Carlo simulation to show the effects of the cost risks to the budget (identifying associated likelihood and consequences), producing results clearly describing the impacts to the SSP budget.</li> <li>• Executing the critical decisions facilitated by comprehensive administrative and communications support.</li> </ul>
<p><b>THE RESULTS</b></p>	<p><b>NASA successfully captured SSP capabilities and assets and substantially reduced cost risk as the SSP retires</b></p> <p>The Decision Engine Futron designed for NASA allowed the agency to achieve SSP utilization and value under a set of known constraints (safety, timing, cost, human capital consideration, and risks and uncertainty). The SSP responded to new requirements from other centers more efficiently, having achieved increased data quality and automated processing. Going forward, a solid foundation for making decisions was established.</p>

With decades of experience helping government and commercial clients further their missions in space, Futron brings unique capabilities and talents to help organizations whose missions on Earth could benefit from a decision management solution approach.

## What Futron Can Do For You

Today's fast-paced, complex, and global business environment offers as many opportunities for growth and collaboration as it presents challenges to the status quo. Organizations successfully navigating these opportunities and challenges have the ability to be flexible and agile in reaching solutions to problems and in making sound business decisions. Organizations that do not will find they have lost their edge—and possibly their relevance.



### Decision Management Solutions

Business & Market Management

Safety & Risk Management

Program & Technology Management

## Our Space Heritage Offers Proven Solutions

After more than 25 years in "the business," the spirit of space endeavors permeates the culture of Futron, where we are applying capabilities developed for space to other industries and markets.

- ★ Futron is applying safety and risk management capabilities to aviation, health care, and food safety projects.
- ★ In the international arena, Futron is applying space market and industry research capabilities to projects with Japan, Australia, and Africa.

The first step to transformation is to make sure your organization has the decision-making infrastructure in place to provide the intelligence you need to weigh your options, identify and mitigate risks, and devise a plan aligned with your mission and strategic goals. Using Futron's proprietary DMS methodology, we can help you transform your organization so you are prepared to meet your business challenges today and into the future.

Futron offers a unique blend of business, technical, and management expertise, along with skills in business strategy, risk management, process

improvement, information management, integrated analysis, performance measurement, and strategic communications. With our DMS approach, Futron works with you to solve your challenges and determine what actions align with your strategic goals. We begin all collaborations by:

1. helping you clarify your vision and strategy for the future
2. assessing the current practice of decision-making within your organization
3. determining DMS requirements, including measurable performance criteria

From there, Futron works with you to architect a DMS for your unique situation. Futron products and services are described on the following page.



## Business & Market Management

Turning information into intelligence and performing analyses, assessments, forecasting, and providing business strategy and marketing research to ensure your company makes better decisions for a better future.

- FORECASTING – Identifies known sources of uncertainty and potential magnitude.
- DUE DILIGENCE – Provides reliable information you need to make strategic decisions.
- MODELING – Quantifies financial considerations for future performance.
- ASSESSMENTS – Anticipates and reacts to market developments, enhancing your strategic position.
- REGULATORY SERVICES – Assesses the impact of regulations on evolving business opportunities.
- BENCHMARKING SERVICES – Creates business plans, justifies investments, and determines policy using consistent, time series data.
- STRATEGIC MARKETING & SALES SUPPORT – Combines business intelligence with industry knowledge to identify sales opportunities.
- INTERNATIONAL SERVICES – Provides tools and information for policy, regulatory, and development decisions.

## Safety & Risk Management

Infusing safety and risk management into organizational decision-making processes at the enterprise, program, or project level.

- SAFETY METRICS – Offers methods of measuring safety performance.
- SAFETY CULTURE SHAPING – Helps build the cultural foundation for an effective safety management system.
- ENTERPRISE RISK MANAGEMENT – Expands existing risk management practices by encouraging best practices.
- PROGRAM & PROJECT RISK MANAGEMENT – Integrates risk management into your organization's culture and decision-making processes.
- DATA DRIVEN RISK VISUALIZATION TOOLS – Improves the way managers analyze and communicate risks and metrics.
- PROBABILISTIC RISK ASSESSMENT (PRA) – Uses engineering, modeling and simulations, and analyses to assess safety and risks.
- SAFETY MANAGEMENT SYSTEMS (SMS) DEVELOPMENT (ICAO/FAA) – Provides decision-making processes and procedures for safety hazard identification and risk control.

## Program & Technology Management

Better decisions result in safer and more productive programs, and provide your organization with the competitive advantage it needs in the marketplace and with your stakeholders.

- DECISION MAKING SUPPORT – Defines and deploys a decision-making infrastructure for improved performance.
- STRATEGIC COMMUNICATIONS PLANS – Provides the means to deliver essential information internally and to stakeholders.
- PERFORMANCE MANAGEMENT – Creates evaluation methods, metrics, and management practices to ensure your goals are met.
- STRATEGIC STUDIES & ANALYSIS – Defines the strategic direction and forms the basis for measuring performance.
- PROGRAM INTEGRATION – Provides solutions on programs' direction, integrity, and performance to meet enterprise goals.
- PROGRAMMATIC RISK MANAGEMENT – Enables risk management plans, processes, and procedures.

## We Understand Your Market — We Understand Your Issues

Regardless of its mission or the sector in which it operates, every organization makes critical decisions that contribute to its growth and performance. With more than 25 years supporting clients from government to NGOs, from private corporations to nonprofit entities, Futron brings decision management solutions to organizations to help them develop strategic decisions aligned with their missions. Futron has chosen the following market sectors to showcase how our unique products can contribute to your organization's missions.



### Health Care Sector



Medical and surgical errors. Medication errors. Breaches of patient confidentiality. Security breaches. Staffing shortages and credentialing. These are some of the operational risks health care institutions face. Strategic risks include

uninsured and underinsured patient populations, meaningful use compliance and accountability issues, quality-based pay structures, and increasing competition for services. Performance within health care reform milestones presents additional risks.

Moving forward, health care institutions need to focus on creating reliable, effective mechanisms for managing risk and improving patient safety across their organizations rather than following the traditional silo approach. Moving forward, health care institutions need to implement a centralized enterprise risk management (ERM) model.

The benefits of ERM include improved decision-making, leading to more effective strategic planning and optimal performance and results.

Knowing where gaps exist in your institution's safety processes and operational procedures helps identify those areas where a DMS can make an improvement. Working with you, we will leverage Futron's decision management expertise in successful safety and risk management engagements to help you develop an ERM solution by providing:

- Risk management capability maturity assessments to make recommendations for improvements.
- Risk Management Implementation Roadmap to detail the process for ERM implementation.
- Safety climate assessments to identify gaps in current safety processes and identify where change is needed.
- Anonymous safety reporting systems to provide a way for employees to report violations anonymously, removing the fear of reprisal, and allowing for a more accurate view of patient safety.
- Safety performance measurement system to gather metrics over time to see how well an organization is performing.



## Food/Pharmaceutical/Retail (Supply Chain) Industries



**B**rands live by the reputation of their products. When foods, pharmaceuticals, or other retail products are tampered with or when contamination occurs, whether accidental or intentional, manufacturers and producers all along the supply chain suffer.

Businesses associated with an adulterated product can be subject to multiple damaging consequences, such as product line shutdowns; massive investigations, fines, or product recalls; loss of investment capital and stakeholder confidence; significant increases in litigation and insurance liability; and long-term decline of the brand name and company's reputation from decreased consumer confidence—to include the possible demise of the brand and its suppliers.

Current measures may be effective at identifying underlying risk factors and capturing assembly-level hazards; but risks associated with other external factors, such as operator error, environmental and security threats, economic climate, and political unrest, among others are not addressed. More recent

applications focus only on securing facilities or shipping lines from terrorist or criminal threat or economically motivated product tampering.

What is missing—and what Futron offers—is an effective hybrid approach – the vertical and horizontal integration of product safety and product defense risk information. Futron will work with you to deploy a tailored decision solution framework to address potential problems through proactive risk management rather than reactive crisis management. The Futron systems-based approach to risk in the food/pharmaceutical/retail industry helps your organization:

- Define areas of vulnerability and discern future risks for more effective resource allocation.
- Determine efficient use of resources and cost savings to secure and monitor supply chain integrity.
- Identify safety risks to the system and advertise the proactive measures taken to gain the trust of the customer and gain market share.
- Use performance measures and data elements already in the system, thus eliminating the need for lengthy research to identify metrics and allowing funds to be allocated to system improvement.

## Space Industry



**W**ith our heritage of supporting NASA, Futron is intimately familiar with the changes occurring in spaceflight. The biggest challenge is an anticipated reduction of government funding, meaning agencies like NASA and companies working with them will

be forced to make tough decisions on spending priorities. At the same time, the industry is witnessing

the expansion of space programs, both here and internationally. In the international arena, more countries are developing their own satellite capabilities and increasing their usage of space applications, prospects offering new partnership opportunities for the United States.

Space is no longer the purview of the traditional space powers and large aerospace companies. The idea of space tourism has captured the imagination and brought many 'NewSpace' companies into the marketplace. Though poised to infuse the industry

## Better Decisions...Better Future The Futron Promise

with new ideas, new technologies, and new ways to do more with less money, they also face real challenges from ITAR restrictions, regulatory issues, and questions about their business cases and technical capabilities.

Futron's expertise, methodologies, and reputation position us to help your organization better understand current issues and likely future directions of the space industry and to maximize your resources. Futron offers your organization knowledgeable, unbiased insight into the current state of the field, including:

- Assessments of the current size of space markets and the abilities of various organizations and companies in the field.
- Forecasts for space products and services such as launches, satellites, satellite services, and emerging markets like space tourism, to analyze the ability of companies and organizations to meet forecasted demand.
- Feasibility of new products and services, or the applications of existing ones in new markets or with new customers.

### Aviation Industry



In the civil aviation industry, nothing has higher priority than aviation safety. Beyond the ever-present shadow of terrorism, avoiding accidents and accident-related fatalities remains at the forefront of safety programs. Risk factors require management

through implementing safety management systems and developing a culture of safety to proactively address risks before an event occurs. Airports and related aviation businesses are facing fast-approaching FAA deadlines for implementing Safety Management Systems (SMS) or risk loss of recertification.

Maintaining and improving safety poses a challenge in an industry significantly threatened by rising fuel costs, increased demand for air travel combined with continued demand for low fares, and a volatile global economy and recession. Key to answering these challenges is the development of an enterprisewide safety culture, in which employees are invested and involved in safety self-management and quality improvement.

Futron is a leader in bringing decision management solutions, safety, and risk management practices to the aviation industry. Futron's experts can help your aviation organization improve performance and help you take your safety programs into the Next Generation through:

- SMS implementation to provide processes for safety hazard identification and effective risk control.
- Safety culture shaping to help you put the cultural foundation for an effective SMS into place.
- Safety performance measurement methodology to provide the capability to track trends in safety performance to forecast future hazards.
- Integration of safety into an ERM program to obtain a comprehensive understanding of risk improves your ability to manage performance.

## Invest in Your Future: Invest in DMS

No two organizations are exactly alike, but every organization has similar objectives: better performance leading to superior results and a competitive edge to sustain and advance the organization's interests. Organizations failing to build solid decision-making infrastructures that align their actions with their missions and goals expose themselves to a chaotic, risk-filled existence and poor investments and returns.

Smart organizations recognize the value of well thought out decisions aligned with their core values and good business and management practices. Smart organizations recognize the value of a decision management solution approach to solving their complex business challenges. Smart organizations choose Futron.



Initial Decision Management Solutions  
Market Focus

## The First Decision Is to Call Futron

When your organization is ready to invest in its future by investing in DMS, your first decision is to call Futron. Our team will collaborate with you and your key stakeholders to identify the opportunities, challenges, and practices that will help your organization transition into a new, higher performing, and more successful future.

Let Futron put our experience to work to help transform your organization! Connect with us at [www.futron.com](http://www.futron.com), [info@futron.com](mailto:info@futron.com), or 1.800.807.4927.

### The Futron Promise

Our customers consistently achieve better performance and results because they have invested in a decision management solutions approach to align their critical decisions with their missions. With more than 25 years of expertise providing decision management solutions to private- and public-sector agencies, corporations, and NGOs, Futron promises our customers: Better Decisions...Better Future. We can do this because decision management is our business. Futron's solutions work because we:

- Start with the most talented, trained, creative, experienced, and committed DMS professionals.
- Define our success in terms of the customer's desired performance and results.
- Collaborate closely with our customers to address their specific issues and challenges.
- Bring innovative DMS methods, tools, standards, and best practices to bear.
- Apply an insightful balance of business, technical, and management expertise to develop effective solutions.

**Better Decisions...Better Future**



## **Futron Corporation**

### **Washington, DC - Corporate Office**

7315 Wisconsin Avenue, Suite 900W  
Bethesda, MD 20814

### **Houston**

2100 Space Park Drive, Suite 100  
Houston, TX 77058

### **Hampton Roads**

4410 East Claiborne Square, Suite 334  
Hampton, VA 23666

[www.futron.com](http://www.futron.com) • 1-800-807-4927

ISO 9001 Registered